IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A throttle calibration control configured to:

determine if throttle actuator position is within an idle position range;

if so, maintain the throttle actuator position as an idle position benchmark for subsequent engine operation until a subsequent throttle actuator positioning more idle than the idle position benchmark; and

establish a WOT position benchmark for subsequent engine operation based on a fixed angular position from the idle position benchmark.

2. (Original) The control of claim 1 further configured to re-set engine control with each detected throttle actuator positioning more idle than the idle position benchmark.

3. (Original) The control of claim 1 wherein the idle position range is defined by a set of throttle position actuator values within a deadband range of a throttle linkage connecting the throttle actuator to a throttle plate.

4. (Original) The control of claim 3 wherein the fixed angular position is 94 degrees.

5. (Original) The control of claim 4 further configured to determine actual throttle plate position during open throttle engine operation from feedback provided by a TPS connected to a throttle shaft designed to rotate the throttle plate between an open and closed position.

6. (Original) The control of claim 1 further configured to:

determine throttle actuator position at engine startup; and

if the throttle actuator position is outside the idle position range, maintain engine idling independent of subsequent throttle actuator position until throttle position is detected in the idle position range.

7. (Original) The control of claim 6 further comprised to require engine shutdown prior to allowance of a more open throttle position.

8. (Original) The control of claim 1 further configured to re-set engine control with each detected throttle actuator position below the idle position benchmark independent of a previous detection of throttle actuator position within the idle position range.

9. (Original) The control of claim 1 further configured to re-establish the WOT position with each actuator positioning below the idle position benchmark.

10. (Original) The control of claim 1 further configured to measure a voltage drop induced by movement of a throttle actuator and measured by a TPS, and determine throttle actuator position based on a comparison of the voltage drop relative to a voltage at WOT.

11. (Original) The control of claim 1 further configured to adjust at least one of fuel flow, ignition timing, and oil injection for subsequent engine operation based on at least the idle position benchmark.

12. – 26. (Canceled)

27. (Original) A method of throttle control calibration comprising the steps of:

determining if throttle actuator position is within an idle position range;

if so, maintaining the throttle actuator position as an idle position benchmark for subsequent engine operation until a subsequent throttle actuator positioning is in the idle position range and more toward idle than a previous idle position benchmark; and

establishing a WOT position benchmark for subsequent engine operation based on a fixed angular position from the idle position benchmark.

28. (Original) The method of claim 27 further comprising the step of re-setting engine control with each detected throttle actuator positioning more idle than a previous idle position benchmark.

29. (Original) The method of claim 27 wherein the idle position range is defined by an actual set of throttle position actuator values within a deadband range of a throttle linkage connecting the throttle actuator to a throttle plate.

30. (Original) The method of claim 29 wherein the fixed angular position is 94 degrees.

31. (Original) The method of claim 30 further comprising the step of determining actual throttle plate position during open throttle engine operation from feedback provided by a TPS connected to a throttle shaft designed to rotate the throttle plate between an open and closed position.

32. (Original) The method of claim 27 further comprising the steps of:

determining throttle actuator position at engine startup; and

if the throttle actuator position is outside the idle position range, maintaining engine idling independent of subsequent throttle actuator position until throttle position is detected in the idle position range.

33. (Original) The method of claim 32 further comprising the step of requiring engine shutdown prior to allowance of a more open throttle position.

34. (Original) The method of claim 27 further comprising the step of re-setting engine control with each detected throttle actuator position within the idle position range independent of a previous detection of throttle actuator position within the idle position range.

35. (Original) The method of claim 27 further comprising the step of re-establishing the WOT position with each actuator positioning in the idle position range.

36. (Original) The method of claim 27 further comprising the step of measuring a voltage drop induced by movement of a throttle actuator and measured by a TPS, and determining throttle actuator position based on a comparison of the voltage drop relative to a voltage at WOT.

37. (Original) The method of claim 27 further comprising the step of adjusting at least one of fuel flow, ignition timing, and oil injection for subsequent engine operation based on at least the idle position benchmark.